

1  
2  
3  
4  
5  
6  
7 UNITED STATES DISTRICT COURT  
8 WESTERN DISTRICT OF WASHINGTON  
9 AT SEATTLE

10 KATHERINE MOUSSOURIS, et al.,

11 Plaintiffs,

12 v.

13 MICROSOFT CORPORATION,

14 Defendant.

CASE NO. C15-1483JLR

ORDER ON MOTIONS TO  
EXCLUDE

15 **I. INTRODUCTION**

16 Before the court are three motions to exclude filed by the parties: (1) Defendant  
17 Microsoft Corporation's ("Microsoft") motion to exclude Dr. Henry S. Farber's expert  
18 opinions (Farber Mot. (Dkt. # 362)); (2) Plaintiffs Katherine Moussouris, Holly  
19 Muenchow, and Dana Piermarini's (collective, "Plaintiffs") motion to exclude certain  
20 expert opinions of Dr. Ali Saad (Saad Mot. (Dkt. # 364)); and (3) Plaintiffs' motion to  
21 exclude Ms. Rhoma Young's expert opinions (Young Mot. (Dkt. ## 367 (sealed), 368  
22 (redacted))). The court has reviewed the parties' filings in support of and in opposition to

1 the motions, the relevant portions of the record, and the applicable law. Being fully  
 2 advised,<sup>1</sup> the court DENIES Microsoft's motion to exclude Dr. Farber's opinions,  
 3 GRANTS in part and DENIES in part Plaintiffs' motion to exclude Dr. Saad's opinions,  
 4 and GRANTS Plaintiffs' motion to exclude Ms. Young's opinions.

## 5 **II. BACKGROUND**

6 Plaintiffs filed this putative class action to challenge Microsoft's "continuing  
 7 policy, pattern, and practice of sex discrimination against female employees in technical  
 8 and engineering roles . . . with respect to performance evaluations, pay, promotions, and  
 9 other terms and conditions of employment." (SAC (Dkt. # 55) ¶ 1.) As a result of these  
 10 alleged policies and practices, Plaintiffs claim that female technical employees "receive  
 11 less compensation and are promoted less frequently than their male counterparts." (*Id.*  
 12 ¶ 3; *see also id.* ¶ 25 ("Microsoft discriminates against female technical employees in (1)  
 13 performance evaluations; (2) compensation; and (3) promotions.")) Plaintiffs  
 14 additionally allege that Microsoft "retaliates against female technical employees who  
 15 complain about this discrimination." (*Id.* ¶ 1.)

16 //

17 //

18 //

---

19 <sup>1</sup> Microsoft requests oral argument (*see generally* Farber Mot.; Saad Resp. (Dkt. # 376);  
 20 Young Resp. (Dkt. # 377)), but the court finds that oral argument would not be helpful to its  
 21 disposition of the motions, *see* Local Rules W.D. Wash. LCR 7(b)(4). Moreover, district courts  
 22 are not required to hold a separate *Daubert* hearing before ruling on motions to exclude. *See*  
*Millenkamp v. Davisco Foods Int'l, Inc.*, 562 F.3d 971, 979 (2009). The court finds that the  
 briefing, expert reports, and deposition testimony of the various experts presented here comprise  
 an adequate record from which the court can make its ruling. *See id.*

On October 27, 2017, Plaintiffs filed a motion to certify a proposed class of women employees in Stock Levels 59-67<sup>2</sup> who work in the Engineering and/or the I/T Operations Professions from September 16, 2012, to the present. (Mot. for Class Cert. (Dkt. ## 228 (sealed), 232 (redacted)) at 1.) Specifically, Plaintiffs argue that Microsoft maintains a “common, discriminatory pay and promotions process”—the “Calibration Process” or “People Discussion Process”—that results in lower pay and fewer promotions for women. (*Id.*) To support their claim that gender-based differentials in pay and promotions result from Microsoft’s Calibration Process, Plaintiffs rely upon the statistical analysis performed by Dr. Farber. (*See id.* at 2, 5-10.)

Microsoft opposes class certification. (*See* Class Cert. Resp. (Dkt. ## 286 (sealed), 285 (redacted).) In its opposition, Microsoft relies on the statistical analysis performed by Dr. Saad to challenge Dr. Farber’s conclusions and to establish that no significant gender-based disparity exists in either pay or promotion. (*See id.* at 21, 23-28.) Microsoft also relies on Ms. Young’s evaluation of Microsoft’s Employment Relations Investigation Team (“ERIT”) to bolster the efficacy of ERIT as a tool Microsoft employs against discrimination. (*Id.* at 35.)

Subsequently, both parties filed motions to exclude. Microsoft challenges the admissibility of Dr. Farber’s opinions, and Plaintiffs challenge the admissibility of some

//

//

---

<sup>2</sup> “Stock levels,” also known as “pay levels,” represent the level associated with an employee and delineate the various salary ranges that Microsoft employees receive. (Farber Rep. (Dkt. # 332) (sealed) ¶ 20.)

1 of Dr. Saad’s opinions and the entirety of Ms. Young’s opinions. (*See* Farber Mot.; Saad  
 2 Mot.; Young Mot.) The court summarizes the relevant portions of each expert’s opinions  
 3 in turn.

4 **A. Dr. Farber**

5 Dr. Farber is the Hughes-Rogers Professor of Economics at Princeton University,  
 6 where he has served on the faculty since 1991. (Farber Rep. ¶ 1.) He received a Ph.D. in  
 7 economics from Princeton University, a Master of Science in Industrial and Labor  
 8 Relations from Cornell University, and a B.S. in economics from Rensselaer Polytechnic  
 9 Institute. (*Id.*) Dr. Farber teaches the analysis of wages, hours, and other issues in labor  
 10 economics, as well as econometrics, which is the application of statistics to economics  
 11 problems. (*Id.*)

12 Dr. Farber analyzed whether there is statistical evidence of discrimination in  
 13 compensation or advancement rates between male and female technical employees in the  
 14 relevant Stock Levels. (*Id.* ¶ 4.) After analyzing various data on Microsoft employees  
 15 from January 1, 2010, through May 31, 2016 (*see id.* ¶¶ 12-13), Dr. Farber concludes that  
 16 female employees in the putative class “are paid less than otherwise similar men, on  
 17 average, and the average difference in pay is statistically significant.” (*Id.* ¶ 5.) Dr.  
 18 Farber further concludes that “women in the class lag behind men in their rate of  
 19 advancement at Microsoft.” (*Id.* ¶ 7.)

20 To reach these conclusions, Dr. Farber utilized three main statistical techniques.  
 21 (*Id.* ¶ 29.) First, Dr. Farber analyzed pay differentials using a multiple regression  
 22 analysis. (*Id.* ¶ 34.) A multiple regression analysis produces a numerical estimate, called

1 a “coefficient,” which measures the relative impact various factors have on pay. (*Id.*) In  
 2 other words, the multiple regression analysis can isolate the “estimate of the difference in  
 3 pay between women and men” after controlling for other differences, such as work  
 4 experience, type of work performed, geographic location, age, and performance reviews.  
 5 (*Id.* ¶¶ 34, 38.) The analysis also measures the likelihood that the difference occurred by  
 6 chance, as measured by the t-statistic and the p-value. (*Id.* ¶ 41.) Larger absolute values  
 7 of the t-statistic indicate that the estimated pay difference is less likely to have occurred  
 8 by chance; in the same vein, lower p-values indicate a lower probability that the observed  
 9 difference arose by chance.<sup>3</sup> (*Id.*)

10 Dr. Farber’s multiple regression analysis revealed that female technical employees  
 11 earn 8.6% less than male technical employees, with a statistically significant t-statistic of  
 12 -25.42. (*Id.* ¶ 52.) After controlling for work experience, age, compensation year, and  
 13 geographic location, the gender pay gap is reduced slightly to 7.4%, with a t-statistic  
 14 of -25.62. (*Id.* ¶ 53.) Additionally controlling for performance review and Discipline—  
 15 “job families within a Profession . . . that produce similar business results”—narrows the  
 16 gap to 6.3%. (*Id.* ¶ 54-55.) And finally, controlling for each worker’s Standard Title, or  
 17 their job title, shrinks the gender pay gap to 2.8% but remains statistically significant with  
 18 a t-statistic of -21.73. (*Id.* ¶ 56.) However, Dr. Farber cautions that including a worker’s

19 //

---

21 <sup>3</sup> Generally, a t-statistic with an absolute value that is greater than 1.96 indicates that the  
 22 observed difference would have occurred by chance less than five percent of the time. (*Id.* ¶ 41.)  
 Similarly, a p-value of 0.0005 indicates that there is only a 0.05% chance that the observed  
 difference arose randomly. (*Id.*)

1 Standard Title may understate the true gender pay gap because women are  
2 “systematically under-leveled relative to men.” (*Id.*)

3 In fact, Dr. Farber characterizes Standard Title, as well as Career Stage and Stock  
4 Level, as examples of “tainted variables”—variables that appear to reduce the pay gap  
5 but only because the factors themselves are correlated with gender and pay through  
6 potentially discriminatory employer decisions. (*Id.* ¶ 46, 58.) To demonstrate this, Dr.  
7 Farber performs an ordered probit analysis, which returned a statistically significant,  
8 negative coefficient to the female indicator variable. (*See id.* ¶ 44, 60-61, 64.) This  
9 negative coefficient indicates that women are systematically assigned to lower Stock  
10 Levels and Career Stages, and thus, women are overrepresented in the lower levels but  
11 underrepresented in the higher levels. (*Id.* ¶¶ 58-64.)

12 Lastly, Dr. Farber utilizes a probit analysis to assess the differences in the  
13 probability of advancement between men and women. (*See id.* ¶¶ 65-77.) A probit  
14 analysis is used when the outcome can take on one of two discrete values—for instance,  
15 being promoted or not being promoted. (*Id.* ¶ 42.) A probit analysis, like a multiple  
16 regression analysis, reveals the influence a factor has on the outcome and thus can  
17 estimate the difference between women and men in the probability of promotion. (*See id.*  
18 ¶ 43.) Dr. Farber concludes that women are 2.1 percentage points less likely to advance  
19 from one Stock Level to the next and 2.6 percentage points less likely to advance from  
20 one Career Stage to the next. (*Id.* ¶ 71.) Both differences are statistically significant.  
21 (*Id.*) Dr. Farber also calculates the differential in absolute terms by comparing the  
22 expected number of Stock Level advancements for women to the actual number of

1 advancements. (*Id.* ¶ 72.) He finds that in total, female technical employees in Stock  
 2 Levels 60-64 were denied 518 advancements that should have been expected. (*Id.* ¶ 77,  
 3 82.) Put another way, Dr. Farber found a shortfall of advancements among women in  
 4 Stock Levels 60 to 64, all of which were statistically significant. (*Id.*)

5 In his deposition, Dr. Farber made clear that he did not analyze the relationship  
 6 between pay and promotion and any particular supervisors or managers. (Farber Dep.  
 7 (Dkt. # 363-1) at 241:11-19.) Thus, he has no opinion on whether “women working for  
 8 different supervisors have higher or lower pay” or were “more or less likely to be  
 9 promoted.” (*Id.* at 242:4-15.) Nonetheless, in his rebuttal report, Dr. Farber calculated  
 10 the pay differentials with regard to each Level 1 supervisor at Microsoft<sup>4</sup> and found that  
 11 “virtually all woman years (more than 99%) are worked under Level 1 supervisors under  
 12 whom women earn less than men, on average, after controlling for the factors in the  
 13 model.” (Farber Rebuttal ¶ 16.) Dr. Farber did not further disaggregate the data. (*See*  
 14 Farber Rep., Farber Rebuttal.)

## 15 **B. Dr. Saad**

16 Dr. Saad is the managing partner of Resolution Economics Group LLC, a firm that  
 17 performs economic and statistical analyses in connection with litigation and consulting  
 18 matters. (Saad Rep. (Dkt. ## 354-1 (sealed), 355-1 (redacted)) ¶ 2.) He holds a Ph.D. in  
 19 economics from the University of Chicago and a B.A. in History and Economics from the

20  
 21 <sup>4</sup> Dr. Farber indicates that 98% of the putative class members report to one of four Level  
 22 1 supervisors. (Farber Rebuttal (Dkt. # 344 (sealed)) ¶ 16.) Level 1 supervisors approve and  
 oversee all promotion and pay decisions but do not usually make promotion decisions for  
 lower-level employees. (DeCaprio Decl. (Dkt. # 295) ¶ 12; Jarvis Decl. (Dkt. # 306) ¶¶ 17-18.)

1 University of Pennsylvania. (*Id.*) Prior to his consulting career, Dr. Saad was on the  
2 faculty of the economics and finance department at Baruch College of the City University  
3 of New York, where he taught labor economics, micro and macroeconomics,  
4 econometrics, and economic history. (*Id.*) Dr. Saad’s work focuses on statistical  
5 analyses of systemic gender discrimination claims. (*Id.*)

6 On February 16, 2018, Microsoft filed a second corrected version of Dr. Saad’s  
7 report (the “revised report”) pursuant to Federal Rule of Civil Procedure 26(e). (*See* Not.  
8 of Saad Revised Rep. (Dkt. # 355).) Microsoft asserts that the revised report rectifies  
9 several mathematical errors but makes no substantive changes. (*Id.* at 1.) In this revised  
10 report, as before, Dr. Saad criticizes Dr. Farber for “aggregating all women together to  
11 gauge statistical significance overall” rather than taking into account variation among  
12 supervisors. (*Id.* ¶¶ 29, 30.) Dr. Saad analyzed how supervisors impact the inquiry by  
13 determining the number of supervisors under whom women earn what they are expected  
14 to earn under to Dr. Farber’s model. (*Id.* ¶ 35.) In other words, Dr. Saad looked at what  
15 women should have been paid under Dr. Farber’s model and analyzed how many  
16 supervisors oversaw women who were over or underpaid. (*Id.*) Dr. Saad concludes that  
17 “supervisors under whom more women earn significantly less as opposed to earning  
18 significantly more . . . are in the minority.” (*Id.* ¶ 36.)

19 Regarding promotions, Dr. Saad compared Dr. Farber’s predicted number of  
20 promotions to the actual number of promotions for the Plaintiffs and their declarants.  
21 (*See id.* ¶¶ 47-49.) In doing so, Dr. Saad assumes that “a probability above 50% indicates  
22 a promotion is more likely than not to occur.” (*Id.* ¶ 49.) Dr. Saad concludes that



1 Plaintiffs and their declarants received more promotions than expected under Dr. Farber's  
 2 model: "Only once does [Dr. Farber's] model predict that a promotion should have  
 3 occurred when it did not." (*Id.*)

4 As a part of his promotions analysis, Dr. Saad draws a distinction between  
 5 promotions that occurred at the annual end-of-the-year review ("annual review") and  
 6 those that occurred at other times in the year, such as at a mid-year review  
 7 ("mid-year/other"). (*Id.* ¶¶ 102-07.) Dr. Saad finds that annual review promotions  
 8 showed no gender difference, whereas the mid-year/other promotions show a statistically  
 9 significant shortfall of promotions. (*Id.* ¶ 105.) To explain this difference, Dr. Saad  
 10 opines that mid-year/other promotions are "different in character" than annual review  
 11 promotions because "one sees business reasons cited more frequently" as justifications  
 12 for mid-year/other promotions. (*Id.* ¶ 107.)

13 To confirm this hypothesis, Dr. Saad read a sample of 1,000 promotion  
 14 justifications<sup>5</sup> and identified 229 "different phrases that would indicate a promotion made  
 15 for business reasons," such as "there is a need," "need:," and "key to keeping Bing Ads  
 16 Private Lab infrastructure [sic] running." (*Id.* ¶¶ 108-09; *see also* Klein Decl. (Dkt. # 365)  
 17 ¶ 6, Ex. 2 ("Business Need Index").) He then searched for those 229 terms in all of the  
 18 promotion justifications and concludes that business reasons were provided for 10.6% of  
 19 the mid-year/other promotions as compared to only 7.2% of the annual review

20 //

---

21 <sup>5</sup> Microsoft managers provide comments that detail their reasons for recommending a  
 22 certain employee for promotion. (Saad Rep. at 70 n.80.) These comments are referred to as  
 "promotion justifications" or "promotion justification comments." (*See id.*)

1 promotions. (Saad Rep. ¶ 109.) Dr. Saad did not speak with anybody at Microsoft  
2 regarding what qualifies as a business need. (Klein Decl. ¶ 5, Ex. 1 (“Saad Dep.”) at  
3 22:23-23:10.)

4 Also as a part of his promotions analysis, Dr. Saad utilized a Z-model rather than a  
5 probit model. (*Id.* ¶ 116.) The Z-model analysis “construct[s] presumed homogeneous  
6 pools with respect to the variables available for study, where employees within these  
7 pools are considered similar, except for their gender.” (*Id.*) For each pool, or “strata,”  
8 the proportion of female promotions should be roughly equal to the proportion of women  
9 in the group. (*Id.*) Thus, the Z-model allows examination of the underlying strata while  
10 also allowing for aggregation across pools to obtain an overall result. (*Id.*) For women  
11 working in the Engineering Profession, Dr. Saad’s aggregated Z-model analysis shows a  
12 2.21% shortfall in promotions that is statistically significant. (*Id.* at 77.)<sup>6</sup> For women in  
13 the I/T Operations Profession, Dr. Saad finds a 0.65% surplus in promotions that is not  
14 statistically significant. (*Id.* at 78.)

15 In conducting his Z-model analysis, Dr. Saad created close to 59,000 selection  
16 pools for women in Engineering and 5,000 selection pools for those in I/T Operations.  
17 (Farber Rebuttal ¶ 47.) Nearly 60% of these pools in each profession had no female  
18 employees, and an additional 8% of the pools in Engineering and 12% of the pools in I/T  
19 Operations had only female employees. (*Id.*) Thus, almost 70% of the pools in each

20 //

---

21 <sup>6</sup> Dr. Saad does not number the tables that he embeds in the body of his report. Thus,  
22 when citing to these tables, the court cites to the page number of the report located in the bottom  
right-hand corner.

1 profession comprised of only a single gender. (*Id.*) Thirty-nine percent of the  
2 Engineering pools and 43% of the I/T Operations pools contained only one individual.  
3 (*Id.*) Dr. Saad acknowledges in his deposition that pools with only men or only women  
4 “do not add to the analysis.” (Saad Dep. at 204:16-205:3.)

5 **C. Ms. Young**

6 Ms. Young is a Human Resources (“HR”) consultant with over 35 years of HR  
7 management experience, dealing directly with employee and employer issues. (Young  
8 Rep. (Dkt. ## 395 (sealed), 394 (redacted)) ¶ 7.) Her consulting work focuses on  
9 designing and implementing policies and procedures to minimize possible discrimination,  
10 harassment, and retaliation. (*Id.* ¶ 8.) Ms. Young has conducted over 300 HR audits, for  
11 a wide variety of organizations. (*Id.* ¶ 9.) She holds a master’s degree in management  
12 from Pepperdine University and an undergraduate degree from University of California,  
13 Los Angeles. (*Id.* ¶ 12.) She has also taught HR and operations management  
14 professionals on how to gather and analyze information, conduct investigations, and  
15 resolve employee complaints. (*Id.* ¶ 14.)

16 Ms. Young was asked to evaluate the HR complaint investigation process at  
17 Microsoft and how the ERIT investigation processes compare with the “suggested  
18 management practices” (“SMPs”). (*Id.* ¶¶ 1-3.) To do so, Ms. Young reviewed the  
19 deposition testimony of ERIT investigators Melinda De Lanoy and Judy Mims;  
20 interviewed Ms. De Lanoy and Kimberly Meyers, the Manager of ERIT; looked over 18  
21 out of 231 ERIT investigation case files; and analyzed the relevant Microsoft HR  
22 policies. (*Id.* ¶ 4; *see also id.*, Ex. 3; Shapiro Decl. (Dkt. ## 360-8 (sealed), 359-8

1 (redacted)) ¶ 5(h), Ex. 8 (“Young Dep.”) at 135:12-15.) Ms. Young did not interview any  
2 complainants who underwent an ERIT investigation. (*Id.* at 177:24-178:3.)

3 Ms. Young reviewed the case files to “assess [ERIT’s] communication style and  
4 investigation process.” (Young Rep. ¶ 5.) Plaintiffs’ counsel identified some of the case  
5 files during the deposition of Ms. De Lanoy. (Young Dep. at 136:6-8.) Defense counsel  
6 selected the remainder of the cases. (*Id.* at 136:24-137:18.) Although different ERIT  
7 investigators oversaw these cases and conducted the investigations in different years, Ms.  
8 Young acknowledged in her deposition that the sample was not meant to be  
9 representative in the following ways:

10 Q: So is it fair to say that your sample was not an attempt to be representative  
11 of the population in terms of the percentages of times that ERIT  
investigations complained about gender versus sexual harassment.

12 THE WITNESS: No.

13 Q: And it wasn’t intended to be representative of the percent of complaints  
14 that come from any particular part of the company versus another part of the  
company?

15 THE WITNESS: That’s correct.

16 Q: And it wasn’t intended to be representative of the number of complaints  
17 that come from a certain year versus a different year?

18 THE WITNESS: That’s correct.

19 Q: And it wasn’t meant to be representative of the percentage of complaints  
20 that are investigated by one particular ERIT investigator versus another ERIT  
investigator?

21 THE WITNESS: I was not trying to single out one or two ERIT investigators  
to focus on in cases that they had done.

22 (*Id.* at 139:8-140:10 (objections omitted).)

1 Ms. Young concludes that “the investigation steps and sequence at Microsoft are  
2 consistent with [SMPs].” (Young Rep. ¶ 21.) She finds that “ERIT investigators are  
3 skilled, objective, and highly experienced.” (*Id.* ¶ 22.) She further finds that Microsoft  
4 has clear anti-discrimination and anti-harassment policies that are communicated  
5 effectively through internal communications, trainings, and websites. (*Id.* ¶¶ 23, 29-36.)  
6 These policies, Ms. Young remarks, are implemented in a “neutral, logical, and skillful  
7 manner.” (*Id.* ¶ 24.) Consistent with SMPs, Ms. Young concludes that ERIT  
8 investigations were thorough, timely, accurate, objective, well-documented, and based on  
9 the unique facts of each case. (*Id.* ¶¶ 37-55.)

10 Ms. Young also observes that Microsoft’s “number of complaints . . . is not  
11 unusual in a company of Microsoft’s size.” (*Id.* ¶ 24.) In fact, Ms. Young remarks that  
12 the “number of complaints may be the result of heightened employee awareness from  
13 increased training, communication about . . . policies, and/or increasing employee  
14 comfort and trust in using the complaint procedure.” (*Id.*)

### 15 III. ANALYSIS

16 Rule 702 of the Federal Rules of Evidence governs the admission of expert  
17 testimony in federal court:

18 A witness who is qualified as an expert by knowledge, skill, experience,  
19 training, or education may testify in the form of an opinion or otherwise if:

20 (a) the expert’s scientific, technical, or other specialized knowledge will help  
the trier of fact to understand the evidence or to determine a fact in issue;

21 (b) the testimony is based on sufficient facts or data;

22 (c) the testimony is the product of reliable principles and methods; and

1 (d) the expert has reliably applied the principles and methods to the facts of  
2 the case.

3 Fed. R. Evid. 702. Rule 702 requires that the expert be qualified and that the “[e]xpert  
4 testimony . . . be both relevant and reliable.” *Estate of Barabin v. AstenJohnson, Inc.*,  
5 740 F.3d 457, 463 (9th Cir. 2014) (en banc) (quoting *United States v. Vallejo*, 237 F.3d  
6 1008, 1019 (9th Cir. 2001)); Fed. R. Evid. 702. Relevancy “simply requires that ‘[t]he  
7 evidence . . . logically advance a material aspect of the party’s case.’” *Estate of Barabin*,  
8 740 F.3d at 463 (quoting *Cooper v. Brown*, 510 F.3d 870, 942 (9th Cir. 2007)).

9 Reliability requires the court to assess “whether an expert’s testimony has a  
10 ‘reliable basis in the knowledge and experience of the relevant discipline.’” *Id.* (quoting  
11 *Kumho Tire Co. v. Carmichael*, 526 U.S. 137, 149 (1999)) (internal citations and  
12 alterations omitted). The Supreme Court has suggested several factors that courts can use  
13 in determining reliability: (1) whether a theory or technique can be tested; (2) whether it  
14 has been subjected to peer review and publication; (3) the known or potential error rate of  
15 the theory or technique; and (4) whether the theory or technique enjoys general  
16 acceptance within the relevant scientific community. *See Daubert v. Merrell Dow*  
17 *Pharm., Inc.*, 509 U.S. 579, 592-94 (1993). The reliability inquiry is flexible, however,  
18 and trial judges have broad latitude to focus on the considerations relevant to a particular  
19 case. *Kumho Tire*, 526 U.S. at 150.

20 In determining reliability, the court must rule not on the correctness of the expert’s  
21 conclusions but on the soundness of the methodology, *Estate of Barabin*, 740 F.3d at 463  
22 (citing *Primiano v. Cook*, 598 F.3d 558, 564 (9th Cir. 2010)), and the analytical

1 connection between the data, the methodology, and the expert's conclusions, *Gen. Elec.*  
2 *Co. v. Joiner*, 522 U.S. 136, 146 (1997); *see also Cooper*, 510 F.3d at 942 ("Rule 702  
3 demands that expert testimony relate to scientific, technical or other specialized  
4 knowledge, which does not include unsubstantiated speculation and subjective beliefs.");  
5 Fed. R. Evid. 702 Advisory Committee's Notes to 2000 Amendments ("[T]he testimony  
6 must be the product of reliable principles and methods that are reliably applied to the  
7 facts of the case."). Moreover, "the proponent of the expert . . . has the burden of proving  
8 admissibility." *Cooper*, 510 F.3d at 942 (citing *Lust v. Merrell Dow Pharms., Inc.*, 89  
9 F.3d 594, 598 (9th Cir. 1996)).

10 The exact application of *Daubert* at the class certification stage remains unclear.  
11 *See Fosmire v. Progressive Max Ins. Co.*, 277 F.R.D. 625, 628-29 (W.D. Wash. 2011)  
12 ("The Ninth Circuit, however, has not yet resolved whether a full analysis under Federal  
13 Rule of Evidence 702 and *Daubert* is required at the class certification stage."); *see also*  
14 *Wal-Mart Stores, Inc. v. Dukes*, 564 U.S. 338, 354 (2011) (expressing in dictum that it is  
15 doubtful *Daubert* does not apply at the class certification stage). However, courts have  
16 struck a balance by applying *Daubert* at the class certification stage, but doing so in a  
17 manner that "recognizes the specific criteria under consideration, as well as the differing  
18 stage of discovery and state of the evidence." *Fosmire*, 277 F.R.D. at 629; *see also*  
19 *Hovenkotter v. SAFECO Ins. Co. of Ill.*, No. C09-0218JLR, 2010 WL 3984828, at \*4  
20 (W.D. Wash. Oct. 11, 2010) ("[T]he court's consideration of the [experts'] opinions  
21 requires it to determine whether their opinions tend to show commonality of claims and  
22 damages among the class members; the court need not conduct a full *Daubert* analysis as

1 to the admissibility for trial of the expert’s opinions.”). Thus, on a motion for class  
2 certification, “it is not necessary that expert testimony resolve factual disputes going to  
3 the merits of plaintiff’s claims”; the testimony simply must be relevant in assessing  
4 whether there was a common pattern or practice that could affect the class as a whole.  
5 *Cholakyan v. Mercedes-Benz, USA, LLC*, 281 F.R.D. 534, 543 (C.D. Cal. 2012) (citing  
6 *Ellis v. Costco Wholesale Corp.*, 657 F.3d 970, 983 (9th Cir. 2011)).

7 The court addresses Microsoft’s motion to exclude Dr. Farber’s opinions before  
8 turning to Plaintiffs’ motions to exclude the opinions of Dr. Saad and Ms. Young.

9 **A. Dr. Farber**

10 Microsoft makes two main arguments to exclude Dr. Farber’s opinions. First,  
11 Microsoft contends that Dr. Farber’s aggregated analysis is irrelevant to showing  
12 commonality because (1) aggregate disparities cannot show a common pattern of  
13 disparities across the relevant decision-making units; and (2) Dr. Farber does not analyze  
14 what role, if any, the challenged Calibration Process plays in the disparities. (Farber Mot.  
15 at 4-9.) Second, Microsoft argues that Dr. Farber’s methodology is unreliable because he  
16 failed to take into account several “key determinations of [the] employment decisions at  
17 issue.” (*Id.* at 10; *see id.* at 10-12.) The court disagrees and takes each argument in turn.

18 *1. Relevance*

19 Microsoft argues first that Dr. Farber’s aggregation of the data renders his  
20 opinions irrelevant because “his analysis is aggregated beyond the level where pay and  
21 promotion decisions are made.” (Farber Mot. at 9.) However, “it is a generally accepted  
22 principle that aggregated statistical data may be used where it is more probative than



1 subdivided data.” *Paige v. California*, 291 F.3d 1141, 1148 (9th Cir. 2002). Aggregation  
2 is “particularly appropriate where small sample size may distort the statistical analysis  
3 and may render any findings not statistically probative.” *Id.* Thus, a plaintiff “should not  
4 be required to disaggregate the data into subgroups which are smaller than the groups  
5 which may be presumed to have been similarly situated and affected by common  
6 policies.” *Id.* (internal quotation marks omitted) (quoting *Eldredge v. Carpenters 46 N.*  
7 *Cal. Counties Joint Apprenticeship and Training Comm’n*, 833 F.2d 1334, 1340 n.8 (9th  
8 Cir. 1987)). Accordingly, whether aggregation is appropriate necessarily depends on “the  
9 structure of the entity being studied in light of the questions sought to be answered.”  
10 *Chen-Oster v. Goldman, Sachs & Co.*, 114 F. Supp. 3d 110, 120 (S.D.N.Y. 2015).

11 In *Chen-Oster v. Goldman, Sachs & Co.*, the company, like Microsoft here,  
12 challenged the aggregation of data across a myriad of business units when the decisions  
13 regarding compensation and promotion were made at the business unit level. *Id.* at 120.  
14 The court rejected that argument. *Id.* at 120-21. In that case, the putative class  
15 challenged the company’s use of “360 review” and “quartiling” processes, which were  
16 utilized in every division and every business unit. *Id.* at 120. Thus, “even if the effects  
17 of those policies may vary in different business units,” the court determined it was  
18 “appropriate to examine these policies across the entire population.” *Id.* at 120. Indeed,  
19 the court observed, disaggregating data to the business unit level produced such small  
20 sample sizes that it “tend[ed] to mask common mechanisms.” *Id.* at 120-21.

21 Accordingly, the court allowed the aggregated statistical analysis “in light of the evidence

22 //

1 that [the company] applies common performance measures” and “in light of the statistical  
2 pitfalls of disaggregation.” *Id.* at 121.

3 Both of those considerations in *Chen-Oster* are also present here. Plaintiffs  
4 challenge Microsoft’s use of the Calibration Process—a companywide system—that was  
5 used across levels and managers in determining pay and promotion. (SAC ¶¶ 26-52.)  
6 Moreover, disaggregating data as Microsoft suggests seems to produce pools with  
7 varying sizes, some of which may “mask common mechanisms” because of their small  
8 sample size. *See supra* § II.B (discussing the disaggregated pools created by Dr. Saad).  
9 Thus, as in *Chen-Oster*, even if Microsoft is correct that the effects of the Calibration  
10 Process vary across decision-maker, that variety does not render an aggregate statistical  
11 analysis wholly irrelevant. *See* 114 F. Supp. 3d at 120-21; *see also Ellis v. Costco*  
12 *Wholesale Corp.*, 285 F.R.D. 492, 522 (N.D. Cal. 2012) (finding “good reason” to rely on  
13 aggregated statistics because it yields “more reliable and more meaningful statistical  
14 results” when the company’s promotion practices are “uniform across the company”)  
15 (emphasis removed).

16 In construing “aggregated statistics as irrelevant to commonality” (Farber Mot. at  
17 6), Microsoft relies on an overreading of *Dukes*. *Dukes* did not, as Microsoft implies (*see*  
18 Farber Mot. at 4-6), determine that the aggregation of data rendered the statistical  
19 analysis irrelevant; nor did *Dukes* preclude the use of aggregate statistics altogether for  
20 future considerations of commonality. *See* 564 U.S. at 356. Indeed, *Dukes* did not  
21 concern a motion to exclude at all. *See id.* at 342. *Dukes* instead held that the aggregated  
22 statistical evidence presented by plaintiffs in that case was insufficient to satisfy the

1 commonality requirement when the “only corporate policy . . . is [one] of *allowing*  
 2 *discretion* by local supervisors.” 564 U.S. at 355. Thus, *Dukes* addressed commonality  
 3 on the merits: when can an aggregate analysis establish “significant proof” that the  
 4 company “operated under a general policy of discrimination” such that there is “a  
 5 common answer to the crucial question *why was I disfavored*.” *Id.* at 353. And, as  
 6 discussed above, whether aggregation is appropriate is a case-specific determination,  
 7 dependent on the company at issue and the claims before the court. *See Chen-Oster*, 291  
 8 F.3d at 1148. Thus, at best, *Dukes* commented on the relevancy of the aggregated  
 9 statistical analysis that was before it. The court declines, as Microsoft urges, to read  
 10 *Dukes* as holding that every expert opinion that aggregates data is irrelevant.<sup>7</sup>

11 Microsoft additionally faults Dr. Farber for not specifically analyzing the  
 12 Calibration Process as a cause for any disparities. (Farber Mot. at 8-9.) It is certainly  
 13 true that Dr. Farber did not draw any specific casual links between the Calibration  
 14 Process and the disparities he found. (*See* Farber Dep. at 264:13-24.) But that does not  
 15 render Dr. Farber’s analysis of the alleged disparity irrelevant to the question of  
 16 commonality. *See Chen-Oster*, 114 F. Supp. 3d at 125 (“[I]t is not necessary for each  
 17 expert to provide evidence establishing every element of a party’s case.”). The disparity

---

18  
 19 <sup>7</sup> Tellingly, the majority of the case law cited by Microsoft involves whether the specific  
 20 statistical evidence presented was sufficient to establish commonality, and not the question  
 21 currently before the court—whether the expert opinion was relevant to the commonality  
 22 question. *See Bolden v. Walsh Const. Co.*, 688 F.3d 893, 897 (7th Cir. 2012) (“We need not  
 determine whether [the] study should have been excluded under Fed. R. Evid. 702.”); *Abram v.*  
*United Parcel Serv. of Am., Inc.*, 200 F.R.D. 424, 431 (W.D. Wis. 2001) (precluding finding of  
 commonality after determining that the aggregate statistical evidence was insufficient); *Artis v.*  
*Yellen*, 307 F.R.D. 13, 26 (D.D.C. 2014) (citing multiple reasons why the statistical evidence  
 presented fell short of proving commonality).

1 that Dr. Farber finds between women and men in pay and promotion “logically  
2 advance[s] a material aspect of [Plaintiffs’] case”—namely, that a gender-based disparity,  
3 in fact, exists that impacts all putative class members. *See Estate of Barabin*, 740 F.3d at  
4 463.

5 In summary, Dr. Farber’s opinions are relevant, despite the fact that Dr. Farber’s  
6 statistical analysis aggregates data across the entire population and does not reach any  
7 conclusion regarding the Calibration Process. Accordingly, the court declines to exclude  
8 Dr. Farber’s opinions on relevance grounds.

## 9 2. Reliability

10 Microsoft additionally argues for exclusion on reliability grounds. (Farber Mot. at  
11 10-12.) Microsoft claims that Dr. Farber “did not account for obvious,  
12 non-discriminatory indicators designating difference in type of work” and thus is “so  
13 incomplete as to be inadmissible.” (*Id.* at 10 (quoting *Bazemore v. Friday*, 478 U.S. 385,  
14 400 n.10 (1986).) Specifically, Microsoft faults Dr. Farber for omitting Stock Level in  
15 the pay analysis and Standard Title in the promotion analysis. (Farber Mot. at 11-12.)

16 Both parties correctly rely on *Bazemore v. Friday* as setting out the relevant  
17 standard for evaluating the inclusion of variables in regression analyses. (*See* Farber Mot.  
18 at 10; Farber Resp. at 8-9.) *Bazemore* explains:

19 While the omission of variables from a regression analysis may render the  
20 analysis less probative than it otherwise might be, it can hardly be said,  
21 absent some other infirmity, that an analysis which accounts for the major  
22 factors “must be considered unacceptable as evidence of discrimination.”  
Normally, failure to include variables will affect the analysis’ probativeness,  
not its admissibility.

1 478 U.S. at 400 (quoting *Bazemore v. Friday*, 751 F.2d 662, 672 (4th Cir. 1984)). Even a  
2 regression analysis “that includes less than ‘all measurable variables’ may serve to prove  
3 a plaintiff’s case.” *Id.* *Bazemore* recognized, however, that there may be “some  
4 regressions so incomplete as to be inadmissible as irrelevant.” *Id.* at 400 n.10.

5 Dr. Farber’s regression analysis is far from one that is “so incomplete as to be  
6 inadmissible.” *See id.* As a preliminary matter, Dr. Farber took into account several  
7 different factors that might affect pay and promotion. He considered a worker’s tenure,  
8 age, location, compensation year, performance review outcomes, job category, and  
9 Standard Title, also known as a job title, in his pay analysis. (*See* Farber Rep. ¶¶ 53-56.)  
10 For his promotion analysis, he factored in Discipline, Stock Level, age, experience,  
11 location, and performance review outcomes. (*Id.* ¶¶ 70-72.) On this basis alone, Dr.  
12 Farber’s report is distinguishable from the cases Microsoft relies upon, in which the  
13 reports relied on factors that had “nothing to do with actual job performance or job  
14 requirements.” *See Anderson v. Westinghouse Savannah River Co.*, 406 F.3d 248, 263  
15 (4th Cir. 2005); *see also Raskin v. Wyatt Co.*, 125 F.3d 55, 68 (2d Cir. 1997) (excluding a  
16 statistical report that made “no attempt to account for other possible causes”).

17 Microsoft is correct that Dr. Farber did not include Stock Level in his pay analysis,  
18 or Standard Title in his promotion analysis. (*See* Farber Rep.) But Dr. Farber provides  
19 reasoned explanations for excluding these two factors. First, Dr. Farber explains that  
20 because Stock Level is a pay band, regressing compensation on Stock Level would  
21 “simply be regressing pay on a proxy for pay, which is inappropriate.” (*Id.* ¶ 47; *see also*  
22 Farber Rebuttal ¶ 59 (describing controlling for Stock Level as asking the “meaningless”

1 question, “after controlling for how much each worker earns, do women earn less than  
2 men?”).)

3 Second, and most importantly, Dr. Farber identifies both Stock Level and Standard  
4 Title as “tainted” variables, that is, both of these variables are themselves affected by  
5 gender bias.<sup>8</sup> (*Id.* ¶¶ 48, 58-64.) “[I]llegitimate reasons—reasons themselves  
6 representative of the unlawful discrimination at issue—should be excluded from the  
7 regression (or otherwise dealt with) to avoid underestimating the significance of a  
8 disparity.” *Morgan v. United Parcel Serv. of Am., Inc.*, 380 F.3d 459, 469-70 (8th Cir.  
9 2004); *see* D. James Greiner, *Causal Inference in Civil Rights Litig.*, 122 Harv. L. Rev.  
10 533, 546-49 (2008). Dr. Farber shows how there is gender disparity in both Standard  
11 Title and Stock Level by illustrating how women are overrepresented in the lower stages  
12 and underrepresented in the higher stages.<sup>9</sup> (*See* Farber Rep. ¶¶ 60-62, 64.) Microsoft  
13 may disagree with Dr. Farber’s conclusions, but the correctness of the expert’s  
14 conclusions does not bear on the *Daubert* determination. *See Estate of Barabin*, 740 F.3d  
15 at 463. Because these variables were themselves subject to bias and would therefore  
16 mask any discrimination, there were legitimate bases for Dr. Farber to have omitted both  
17 Stock Level and Standard Level.

18 //

---

19 <sup>8</sup> Dr. Farber shows how Career Stage is a tainted variable. (*See* Farber Rep. at ¶¶ 59-62.)  
20 Because Standard Level is dependent on Career Stage, Dr. Farber concludes that Standard Level  
is likewise a tainted variable. (*Id.* ¶ 58.)

21 <sup>9</sup> Indeed, Microsoft’s expert witness, Dr. Saad, reaches the same conclusion: Dr. Saad  
22 found a gender-based disparity in Stock Level with a t-statistic of -17.55; a t-statistic of just 1.96  
is considered statistically significant. (Saad Rep. ¶ 129; *id.* at 88.)

1 In sum, the court finds that Dr. Farber's expert opinions are both relevant and  
2 reliable. Accordingly, the court denies Microsoft's motion to exclude Dr. Farber's expert  
3 reports and conclusions.

4 **B. Dr. Saad**

5 As a threshold matter, the parties disagree on which version of Dr. Saad's report  
6 should be considered. On February 16, 2018, Microsoft submitted, for the second time, a  
7 corrected version of Dr. Saad's report, which Microsoft asserts rectifies several  
8 mathematical errors but makes no substantive changes. (*See* Not. of Saad Revised Rep.)  
9 Plaintiffs disagree. They filed a surreply asking the court to strike this newest version as  
10 untimely (Surreply (Dkt. # 357)) and also argued in their motion to exclude that the new  
11 report cannot be considered (*see* Saad Mot. at 5 n.1, 10-11).

12 As to the motion itself, Plaintiffs do not challenge Dr. Saad's conclusions as a  
13 whole. (Saad Mot. at 1.) Instead, Plaintiffs seek to exclude four specific portions of Dr.  
14 Saad's opinions because Plaintiffs assert they fail to meet the standards of reliability  
15 under Rule 702 and *Daubert*: (1) Dr. Saad's identification and subsequent search for  
16 "business reason" terms; (2) his use of 50% as a probability threshold for determining  
17 whether a predicted promotion would occur; (3) the number of pools Dr. Saad  
18 constructed and their usefulness in a Z-model analysis when many of those pools  
19 contained employees of only one gender; and (4) the mathematical errors contained  
20 within his predicated pay analysis. (*Id.*) The court determines which of Dr. Saad's  
21 reports to consider first before addressing each of Plaintiffs' challenges.

22 //

1        *1. Revised Report*

2        Plaintiffs assert that Dr. Saad’s February 16, 2018, revised report “constitute[s] an  
3 impermissible supplemental expert opinion” and is thus untimely pursuant to the court’s  
4 scheduling order. (Surreply at 1; *see* Sched. Order (Dkt. # 226) at 1.) Microsoft  
5 maintains that Dr. Saad’s revised report “simply corrected the programming error and  
6 re-ran the same analyses” and thus is permitted—and even required—by Federal Rule of  
7 Civil Procedure 26(e). (Saad Resp. at 11.)

8        A party must submit its expert witness disclosures “at the times and in the  
9 sequence that the court orders.” Fed. R. Civ. P. 26(a)(2)(C). However, “if the party  
10 learns that in some material respect the disclosure or response is incomplete or incorrect,  
11 and if the additional or corrective information has not otherwise been made known to the  
12 other parties during the discovery process or in writing,” the party “must supplement or  
13 correct its disclosure or response.” *Id.* 26(e)(1). Rule 26(e)’s duty to supplement is not  
14 “a loophole through which a party who . . . wishes to revise her disclosures in light of her  
15 opponent’s challenges to the analysis and conclusions therein, can add to them to her  
16 advantage after the court’s deadline.” *Luke v. Family Care and Urgent Med. Clinics*, 323  
17 F. App’x 496, 500 (9th Cir. 2009). Instead, Rule 26(e) should only apply when the party  
18 “correct[s] an inaccuracy” or “fill[s] in a gap based on information previously  
19 unavailable.” *Id.*

20 //

21 //

22 //



1 Plaintiffs aptly do not contest what Rule 26(e) allows.<sup>10</sup> Instead, they contend that  
 2 Dr. Saad’s revised report falls outside the ambits of Rule 26(e) because it “offer[s]  
 3 modified original opinions as well as unauthorized rebuttal” of Dr. Farber’s report.  
 4 (Surreply at 1.) But Plaintiffs offer no specific citation as to where these “new opinions”  
 5 are in the revised report. (*See* Surreply at 1 (citing only to Dr. Saad’s declaration); Saad  
 6 Mot. at 11 (citing to Plaintiffs’ surreply); Saad Reply (Dkt. # 413) at 6 (same).) In its  
 7 review of the red-lined version filed by Microsoft, the court finds that the changes are  
 8 corrections of mathematical errors that, as Dr. Saad represents, “ha[ve] only a minor  
 9 impact on the results and do[] not change the substantive conclusions.” (*See* Saad  
 10 Revisions (Dkt. # 354-2) at 2.) These changes are merely “updated figures using the  
 11 same methodology” that are not “significantly different from the original reports.” *See*  
 12 *Holiday Resales, Inc. v. Hartford Cas. Ins. Co.*, No. 07-1321JLR, 2009 WL 11343449, at  
 13 \*1-2 (W.D. Wash. Oct. 2, 2008). Accordingly, the court concludes that the revised report  
 14 is properly before the court pursuant to Rule 26(e).<sup>11</sup>

---

15  
 16 <sup>10</sup> Indeed, Plaintiffs recently filed a motion seeking leave to file a supplemental rebuttal  
 17 report from Dr. Farber. (*See* Mot. to Supp. Farber Rep. (Dkt. # 458).) In that motion, Plaintiffs  
 18 make the same argument regarding Rule 26(e) that they chastise Microsoft for making here.  
 19 (*Compare id.* at 2 (“The Rules not only permit a party to supplement expert opinions in these  
 20 circumstances, but require it.”), *with* Saad Resp. at 11 (“Rule 26(e), however, not only permits  
 21 but requires an expert witness to correct his report.”).)

19 <sup>11</sup> Plaintiffs also assert that Rule 26(e) “explicitly states that [any] changes must be  
 20 disclosed prior to court-ordered discovery deadlines.” (Saad Reply at 6.) Not so. Rule 26(e)(2)  
 21 specifies that any changes must adhere to Rule 26(a)(3), which governs pretrial disclosures. Fed.  
 22 R. Civ. P. 26(e)(2). Rule 26(a)(3), in turn, specifies that disclosures must be made “at least 30  
 days before trial.” *Id.* 26(a)(3)(B); *see also* *Holiday Resales*, 2008 WL 11343449, at \*2 (“The  
 party must supplement the expert report by the time the party’s pretrial disclosures are due under  
 Federal Rule of Civil Procedure 26(a)(3)(B), *i.e.*, at least 30 days prior to trial.”). The pretrial  
 disclosure deadline is plainly not the same as any court-ordered discovery deadline.

1           2. “*Business Reason*” Analysis

2           Plaintiffs seek to exclude the portions of Dr. Saad’s report in which he details how  
3 he assessed that mid-year/other promotions “were more likely to be related to business  
4 reasons than are promotions that occur during the annual review.” (Saad Mot. at 7-9.)  
5 Plaintiffs criticize Dr. Saad’s word-search analysis—in which Dr. Saad personally  
6 identified words he believed to connote a “business need” and subsequently searched for  
7 those words in all of Microsoft’s promotion justifications—as unscientific and unreliable.  
8 (*Id.* at 7.) The court agrees.

9           First, Microsoft has not proved that Dr. Saad possesses a “reliable basis in the  
10 knowledge and experience of” identifying what business needs are in the context of  
11 Microsoft. *See Estate of Barabin*, 740 F.3d at 463. Dr. Saad admits that, out of the  
12 hundreds of cases in which he served as an expert, this is the first time he has conducted a  
13 “word search business need study” like the one conducted here. (Saad Dep. at 25:6-13.)  
14 Moreover, Dr. Saad did not discuss the issue with the Microsoft HR department or  
15 anyone responsible for making promotion decisions at the company; indeed, Dr. Saad did  
16 not speak with anyone at Microsoft at all regarding what the company regards as a  
17 business need. (*Id.* at 22:23-23:10.)

18           When asked about how he identified the “business need” terms, Dr. Saad offers  
19 nothing more than the conclusory sentence that the identified phrases “all occurred in  
20 context where it was clear a promotion justification included a business reason.” (*See id.*  
21 at 22:2-4; *see also id.* at 24:8-11 (“The process was to read many, many promotion  
22 justifications and to identify those that clearly had a business justification.”).) Thus, Dr.

1 Saad’s methodology seemingly boils down to reading the justifications and pulling out  
2 phrases that struck him or his staff as “clearly” having a business justification. (*See id.*)

3         Given the vague methodology offered, it is no surprise that Microsoft offers no  
4 evidence that this methodology has been subjected to peer review or publication, or that  
5 the technique enjoys general acceptance within the relevant scientific community. *See*  
6 *Daubert*, 509 U.S. at 592-94. Nor does Microsoft provide this technique’s known or  
7 potential error rate; in fact, Dr. Saad disclosed that whether his identification was over or  
8 under-exclusive “didn’t concern [him].” (Saad Dep. at 51:23-25.) Nonetheless, Dr. Saad  
9 maintains “with certainty” that his conclusions “would not be changed by any other sort  
10 of search [Plaintiffs] would do.” (*Id.* at 52:4-8.) Dr. Saad supports this belief not with an  
11 indication of accuracy, but instead with his “knowledge of how statistical processes and  
12 distributional properties work.” (*Id.* at 52:13-17.)

13         The lack of reliability in Dr. Saad’s methodology is highlighted in his final list of  
14 229 identified terms. (*See Business Need Index.*) Some terms are so specific that they  
15 are unlikely to appear in any other comments. (*See id.* at 4-5 (identifying phrases such as  
16 “azure notification hub is expanding,” “the need to have a strong senior ic band grows  
17 with it,” and “key to keeping Bing Ads Private Lab infrastructure [sic] running”); *see*  
18 *also* Farber Rebuttal ¶ 40 (stating that nearly half of Dr. Saad’s terms returns only one  
19 promotion justification—presumably the original justification from which the term was  
20 pulled—as relating to business need). Other terms are extremely general. (*See Business*  
21 *Need Index* at 1 (identifying phrases such as “we have asked,” “I could use,” and “new  
22 branch”).) The court focuses on these business-need terms not to rule on the correctness

1 of Dr. Saad’s identifications, but instead to illustrate how his identifications resemble the  
2 “unsubstantiated speculation and subjective beliefs” that do not pass muster under Rule  
3 702 and *Daubert*. See *Cooper*, 510 F.3d at 942.

4 Microsoft clarifies that Dr. Saad “did not offer absolute opinions about which  
5 promotions definitively were made for business need.” (Saad Resp. at 7.) But “a witness  
6 must either have first-hand knowledge of the matter about which he testifies . . . or he  
7 must utilize expertise in order to aid the finder of fact in understanding esoteric or  
8 complex evidence.” *Chen-Oster*, 114 F. Supp.3d at 124. Dr. Saad’s “business needs”  
9 analysis falls into neither category. As discussed above, he does not have the expertise to  
10 determine what qualifies as a “business need,” and it is the employees or managers who  
11 have first-hand knowledge of the reason behind the promotions. Thus, it is inappropriate  
12 to present the “business needs” evidence with the imprimatur of an expert witness.

13 Microsoft also argues that Plaintiffs’ criticisms regarding Dr. Saad’s judgment “at  
14 most go to weight and do not warrant exclusion.” (*Id.* at 8.) In doing so, Microsoft  
15 mischaracterizes Plaintiffs’ objections. Plaintiffs are not simply challenging the accuracy  
16 of the final list of business-need terms at which Dr. Saad arrived; they question the  
17 methodology—or lack thereof—that Dr. Saad relied upon to arrive at that list. Such a  
18 criticism, when founded, warrants exclusion. See *Estate of Barabin*, 740 F.3d at 463.

19 In sum, Dr. Saad’s analysis regarding the business-need distinction between  
20 mid-year/other promotions and annual review promotions was not the product of reliable  
21 principles and methods. See Fed. R. Evid. 702. Accordingly, the court grants Plaintiffs’  
22 motion to exclude the portions of Dr. Saad’s opinion that rely on his business-need

1 analysis. Thus, the court excludes paragraphs 106 to 110, as well as the graph on page  
2 72, that speak of how promotions may differ based upon business need.

3 *3. 50% Probability Threshold*

4 Plaintiffs challenge Dr. Saad’s use of an assumption that “if the predicted  
5 probability of a promotion . . . is over 50% (meaning more likely to occur than not) then  
6 the promotion ‘should have occurred’” and conversely, that “if the same figure was under  
7 50%, the promotion should not have occurred.” (Saad Mot. at 4.) Microsoft responds  
8 that Dr. Saad’s use of a 50% threshold is an acceptable statistical method, and thus, any  
9 dispute goes to weight, not admissibility. (Saad Resp. at 8-9.) The court agrees with  
10 Microsoft.

11 The court’s *Daubert* duty is to judge the reasoning used in forming an expert  
12 conclusion and whether that reasoning is scientific. *Kennedy v. Collagen Corp.*, 161 F.3d  
13 1226, 1230-31 (9th Cir. 1998). The presence of opposing scientific tests or methods  
14 “should not preclude the admission of the expert’s testimony—they go to the *weight*, not  
15 the admissibility.” *Id.*; accord *McCulloch v. H.B. Fuller Co.*, 61 F.3d 1038, 1044 (2d Cir.  
16 1995) (stating that disputes as to “faults in [an expert’s] use of [a particular]  
17 methodology” go to weight, not admissibility). Thus, so long as the methods employed  
18 by the expert are scientifically valid, disagreement with the assumptions behind the  
19 methods or the methodology employed does not warrant exclusion. *S.E.C. v. Das*, 723  
20 F.3d 943, 950 (8th Cir. 2013).

21 Microsoft has provided evidence that utilization of a 50% threshold is an  
22 acceptable method for measuring the “goodness of fit” in a probit analysis. (See Saad

Decl. (Dkt. # 374) ¶ 3, Ex. A (“Woodridge Textbook”) at 465 (utilizing a 0.5 threshold when computing predicted probability); *Id.* ¶ 4, Ex. B (“Maddala Textbook”) at 334 (utilizing a 0.5 threshold to “count the number of correct predictions”).) Plaintiffs are, of course, free to dispute whether utilization of that statistical method, or whether Dr. Saad’s prediction model overall, is appropriate. (*See* Saad Reply at 3 (arguing that a 50% threshold is only applicable to evaluate an aggregated regression analysis, not to predict individual promotion outcomes).) But that dispute does not warrant the exclusion of Dr. Saad’s opinion at the *Daubert* stage. *See Kennedy*, 161 F.3d at 1230-31. Accordingly, the court denies Plaintiffs’ motion to exclude this portion of Dr. Saad’s opinion.

#### 4. Pools in Z-Model Analysis

The court reaches a similar conclusion regarding Plaintiffs’ challenge of Dr. Saad’s disaggregation of the data while performing his Z-model analysis. Both parties recognize that a Z-model analysis, or the selection pool method, is a well-recognized statistical modeling technique that is often utilized to analyze disparities, especially those present in employment litigation cases. (Saad Resp. at 9-10; Saad Reply at 4.) Thus, the court finds that Dr. Saad utilized scientifically sound and widely accepted methodology while conducting his study.

Plaintiffs, instead, take issue with how Dr. Saad applied the selection pool method—specifically the number of pools into which Dr. Saad split the data and how many of those pools “provide no useful information.” (*See* Saad Mot. at 4-5.) Plaintiffs are correct that Dr. Saad split the data into numerous pools and that a proportion of those pools contain no gender diversity and thus, as Dr. Saad admits, “do not added to the

1 analysis.” (See Saad Dep. 204:16-205:3.) But Microsoft emphasizes that a Z-model  
2 analysis must compare similarly situated employees, and thus, Dr. Saad’s small pool  
3 sizes are merely “a function of the highly differentiated work that employees . . .  
4 perform.” (Saad Resp. at 10.) Indeed, Dr. Saad observes that having some strata offer  
5 “no useful information” is “a very common outcome in any aggregated selection model  
6 [where] you are using a number of factors to create the strata.” (Saad Dep. at 206:15-21.)

7 Plaintiffs’ challenges qualify as “objections to the inadequacies of [Dr. Saad’s]  
8 study”—the exact kind of concerns that “go[] to the weight of the evidence rather than its  
9 admissibility.” See *Hemmings v. Tidyman’s Inc.*, 285 F.3d 1174, 1188 (9th Cir. 2002).

10 In *In re Phenylpropanolamine (PPA) Prod. Liab. Litig.*, 289 F. Supp. 2d 1230 (W.D.  
11 Wash. 2003), the court considered a similar challenge regarding the small numbers upon  
12 which a study was based. *Id.* at 1241. Yet, despite those inadequacies, the court found  
13 “the methodology scientifically sound,” and thus, concluded that “any flaws that might  
14 exist go to the weight afforded the [study at issue], not its admissibility.” *Id.* at 1240-41.

15 The court reaches the same conclusion here. Despite the “inadequacies” Plaintiffs  
16 identify in Dr. Saad’s analysis, Dr. Saad utilizes a scientifically sound method of  
17 analysis—one that requires him to disaggregate the data into pools containing individuals  
18 who are similar with respect to variables that influence promotions. Thus, any flaws that  
19 Plaintiffs identify may affect the weight afforded to Dr. Saad’s study but do not warrant  
20 the study’s exclusion. Accordingly, the court denies Plaintiffs’ motion to exclude this  
21 portion of Dr. Saad’s opinions.

22 //

1           5. *Mathematical Errors*

2           Plaintiffs lastly seek to exclude Dr. Saad’s predictions of individual employees’  
 3 pay because Plaintiffs allege that Dr. Saad made “numerous mathematical and statistical  
 4 errors.” (Saad Mot. at 5.) Plaintiffs point out three errors: (1) assuming that all  
 5 employees, regardless of Standard Title, receive the same average compensation; (2)  
 6 incorrectly computing the standardized residual; and (3) omitting a mathematical  
 7 component, called the “smearing factor,” when transforming a natural logarithm (“log”) of  
 8 total compensation into dollar terms. (*Id.*) The first two of these errors, as Plaintiffs  
 9 concede, were corrected in Dr. Saad’s revised report.<sup>12</sup> (*See* Saad Mot. at 11; *see also*  
 10 Saad Rep.) The court has determined that this revised report is properly before the court,  
 11 *see supra* § III.B.1, and thus, the only error that remains in dispute is the omission of the  
 12 “smearing factor.”

13           Plaintiffs’ concern regarding the “smearing factor” does not render Dr. Saad’s  
 14 analysis unreliable. As Microsoft argues, there is evidence that the “smearing factor” is  
 15 not required in all circumstances. (*See* Saad Decl. ¶ Ex. C (“Manning Article”) at 464 n.3  
 16 (noting other ways to “get a consistent estimate of the smearing factors”).) Thus, Dr.  
 17 Saad’s decision to not utilize the “smearing factor” in this scenario—a choice within the  
 18 bounds of statistical analysis—is another purported “inadequacy” that Plaintiffs may  
 19 argue affords the opinion less weight. *See Hemmings*, 285 F.3d at 1188. It does not,

20  
 21           <sup>12</sup> Even if the first two mathematical errors were not corrected, it is doubtful that these  
 22 technical errors would have been adequate grounds to exclude an entire opinion. *See Todd v.*  
*Tempur-Sealy Int’l, Inc.*, No. 13-cv-04984-JST, 2016 WL 5462428, at \*6 n.5 (N.D. Cal. Sept.  
 28, 2016) (refusing to exclude expert opinion because of a mathematical error).



1 however, warrant exclusion of the entire opinion. Because Dr. Saad's revised report  
 2 corrected the first two errors, and the third, even if erroneous, does not warrant exclusion,  
 3 the court denies this portion of Plaintiffs' motion to exclude Dr. Saad's opinions.<sup>13</sup>

4 In summary, the court grants Plaintiffs' motion as it pertains to Dr. Saad's  
 5 "business needs" analysis and excludes paragraphs 106 to 110 as well as the graph on  
 6 page 72 of Dr. Saad's revised report. However, the court denies Plaintiffs' motion in all  
 7 other respects.

### 8 **C. Ms. Young**

9 Plaintiffs seek to exclude Ms. Young's report for four reasons: (1) Ms. Young  
 10 "lacks a sufficient understanding of the HR field" and thus is not qualified; (2) her report  
 11 is not based on sufficient facts or data; (3) her report is not based on any scientific  
 12 method and is thus unreliable; and (4) her report is inconsistent with the accepted  
 13 principles and methods in the HR field. (Young Mot. at 1-2.) Ms. Young seems to be  
 14 relying on her personal experience to evaluate Microsoft's ERIT practices (*see* Young  
 15 Mot. at 4-5; Young Resp. at 5), but the court "must ensure that expert testimony, whether  
 16 it is based on 'professional studies or personal experience,' employs . . . the same level of  
 17 intellectual rigor that characterizes the practice of an expert in the relevant field."

---

18  
 19 <sup>13</sup> Based on the alleged mathematical errors, Plaintiffs also challenge the reliability of  
 20 three pie charts Dr. Saad utilized to illustrate the number of supervisors who over or under-pay  
 21 female employees. (Saad Mot. at 11.) Because the court finds that the mathematical errors do  
 22 not warrant exclusion, the court likewise denies Plaintiffs' request to exclude the pie charts on  
 this ground. Moreover, the court does not agree that the pie charts are "fundamentally  
 misleading," as Plaintiffs allege. (*See id.*) Although Plaintiffs are correct that the pie charts  
 represent the number of supervisors, and not the number of female employees those supervisors  
 oversee, that distinction does not render Dr. Saad's methodology unreliable. Thus, the court  
 denies Plaintiffs' motion to exclude the three pie charts.

1 *Fortune Dynamic, Inc. v. Victoria's Secret Stores Brand Mgmt., Inc.*, 618 F.3d 1025,  
2 1035-36 (9th Cir. 2010) (quoting *Kumho*, 526 U.S. at 152). Because the court finds that  
3 Ms. Young's study is not based on sufficient facts or data, the court does not reach the  
4 remainder of Plaintiffs' objections.

5 "Relevant expert testimony is admissible only if an expert knows of facts which  
6 enable him to express a reasonably accurate conclusion." *Smith v. Pac. Bell Tel. Co.*,  
7 *Inc.*, 649 F. Supp. 2d 1073, 1096 (E.D. Cal. 2009); *see also* Fed. R. Evid. 702 (requiring  
8 the expert opinion to be based on sufficient facts or data to be reliable). Opinions that are  
9 derived from erroneous or incomplete data are appropriately excluded. *Id.*; *see*  
10 *Arjangrad v. JPMorgan Chase Bank, N.A.*, No. 3:10-CV-01157-PK, 2012 WL 1890372,  
11 at \*6 (D. Or. May 23, 2012). In *Powell v. Anheuser-Busch Inc.*, 2012 WL 12953439  
12 (C.D. Cal. Sept. 24, 2012), the court considered an expert report that relied on evidence  
13 that did not "provide a complete picture of the relevant events." *Id.* at \*6. The court thus  
14 reasoned that the expert "offer[ed] opinions without a full understanding or knowledge of  
15 the facts of this case." *Id.* Because the expert "failed to sufficiently consider the relevant  
16 underlying facts necessary to support his opinions and conclusions," the court excluded  
17 the opinion as unreliable. *Id.* at \*7.

18 Here, the court finds several issues with the facts and data relied upon by Ms.  
19 Young. First, Ms. Young reviewed only 18 out of 231 gender complaints—or 7.79% of  
20 the gender complaints reviewed by ERIT. Plaintiffs' rebuttal expert, Dr. Caren Goldberg,  
21 observes that any sample "that comprises less than 10% of the total population of cases  
22 raises questions about representativeness." (Goldberg Rep. (Dkt. ## 346 (sealed), 359-12

1 (redacted) ¶ 15.) This is because “[s]maller samples are more likely to be different from  
2 the population than are larger ones, so smaller samples have more sampling error.” (*Id.*)  
3 Indeed, Ms. Young concedes that she reviewed only “a small portion” of the total number  
4 of complaints. (Young Dep. at 135:8-10.) Given the small sample size, the sampling  
5 error of the complaints is likely substantial. (*See* Goldberg Rep. ¶ 15.)

6 Second, the complaints reviewed by Ms. Young are not representative of all  
7 complaints. Representativeness is essential to the reliability of a study because to the  
8 extent that a sample “systematically differs from the population, inferences about the  
9 population from the sample are misleading.” (Goldberg Rep. ¶ 16.) In other words, if the  
10 18 complaints reviewed by Ms. Young is not representative of all of the complaints  
11 processed by ERIT, Ms. Young’s opinion regarding ERIT’s efficacy would fail to meet  
12 the standards of Rule 702 and *Daubert*. Ms. Young did not randomly select the files to  
13 be considered. Instead, Ms. Young chose ten files that were attached to Plaintiffs’  
14 deposition of Ms. De Lanoy and asked Microsoft’s counsel to “add[] a few extra cases.”  
15 (*See* Young Dep. at 136:6-10.) The fact that some of the files were selected by defense  
16 counsel could suggest that “the selection of which [files] were analyzed was subject to  
17 bias.” *See Chen-Oster*, 114 F. Supp. 3d at 124. However, standing alone, selection of  
18 some files by defense counsel would likely not undermine the representativeness of the  
19 selected files.<sup>14</sup> *See Arjangrad*, 2012 WL 1890372, at \*6 (recognizing “courts generally

---

20  
21 <sup>14</sup> Contrary to Plaintiffs’ assertion, *Chen-Oster* does not stand for the proposition that  
22 counsel selection of data alone renders an expert analysis unreliable. (*See* Young Mot. at 7 n.7.)  
Instead, *Chen-Oster* found the expert opinion unreliable for “a number of reasons,” only one of  
which was related to who selected the sample to be analyzed. *See* 114 F. Supp. 3d at 124.

1 permit” the “common practice for counsel to select a subset of documents to give to a  
2 potential expert”).

3 The bigger problem is that Ms. Young admits the sample was not representative—  
4 and indeed, was not intended to be representative—of the larger universe of complaints  
5 reviewed by ERIT. (*See* Young Dep. 139:8-140:10.) Ms. Young repeatedly conceded  
6 during her deposition that the sample she reviewed was not an attempt to be  
7 representative of the claims presented, the source of the complaints, or the years in which  
8 claims arose. (*See id.*) She did not give defense counsel any specific instructions on how  
9 to select cases that would be representative. (*See id.* at 137:11-18.) Nor did Ms. Young,  
10 after she received the sample, take any additional steps to check or ensure that it is  
11 representative of how ERIT handles all of its complaints. (*See generally* Young Rep.;  
12 Young Dep.) This lack of representativeness—combined with the sampling error  
13 resulting from the small sample size and potential selection bias stemming from choice of  
14 the files by defense counsel—suggests that the case files Ms. Young relied upon did not  
15 “provide a complete picture of the relevant events.” *See Powell*, 2012 WL 12953439, at  
16 \*6. Thus, Ms. Young’s methodology, based upon inferences drawn from the incomplete  
17 sample, is unreliable.<sup>15</sup>

---

18 <sup>15</sup> Curiously, Ms. Young emphasizes that the case files were only “complements to [her]  
19 opinion” and that her aim was “not to rehash . . . how well [the investigation] was conducted.”  
20 (Young Dep. 132:23-25; *see also id.* at 267:6-9 (stating that she did not review the case files to  
21 determine “whether or not [she] think[s] [the ERIT investigators] did a good or bad job.”).) But  
22 Ms. Young’s assignment was to “evaluate[] how Microsoft’s investigation processes compare  
with usual and customary HR,” including an evaluation of the “quality of the investigation  
process.” (Young Rep. ¶¶ 3.) Such an evaluation necessarily involves, at some level, a review  
of how well the investigation was conducted in each case file. As Dr. Goldberg opines,  
“[b]ecause the investigations are the unit of analysis, they necessarily need to be the primary

1 Microsoft offers no evidence that the sample reviewed by Ms. Young met any  
2 measure of scientific representativeness. (*See* Young Resp.) Instead, Microsoft baldly  
3 asserts—without any legal citation—that “Ms. Young’s approach was biased in  
4 *Plaintiffs’* favor” because ten of the files were identified by Plaintiffs in their deposition  
5 of Ms. De Lanoy. (Young Resp. at 7; *see also* Young Dep. at 136:6-8.) But, as Plaintiffs  
6 aptly argue, Ms. Young’s reliance on a deposition only “underscores the problem” rather  
7 than resolves the issue. (*See* Young Reply (Dkt. # 397) at 4.) Documents selected for  
8 use in a deposition are not designed to be representative of the overall universe of  
9 complaints. Tellingly, Microsoft offers no support for the notion that a sample is  
10 adequate simply because some of the files originated from Plaintiffs’ deposition.

11 Nor was the other data relied upon by Ms. Young sufficient. Ms. Young chose  
12 only to interview arguably the two most experienced members of the ERIT investigations  
13 team—Ms. De Lanoy, the investigator with the most years of experience, and Ms.  
14 Meyers, the manager of ERIT. (*See* Young Dep. at 241:9-19, Ex. 6; Goldberg Rep. at  
15 ¶ 12.) Moreover, Ms. Young chose to interview Ms. De Lanoy after already reviewing  
16 Ms. De Lanoy’s deposition, which “is not only superfluous, [but] results in an  
17 overweighting of that individual’s perspective.” (Goldberg Rep. ¶ 12.) Ms. Young did  
18 not interview the least experienced member of the ERIT team. Indeed, when evaluating  
19 the experience of the ERIT team, Ms. Young omitted an inexperienced member from the  
20 list with no explanation. (*See* Young Rep. Ex. 6; Goldberg Rep. ¶ 12.) Additionally, Ms.

21 \_\_\_\_\_  
22 source of data.” (Goldberg Rep. ¶ 11.) Ms. Young’s choice to relegate what should be the  
primary source of data to a “complementary” role further augments the unreliability of the study.

1 Young's choice to interview ERIT investigators suffers from "a significant danger of  
 2 reporting bias." *See Chen-Oster*, 114 F. Supp. 3d at 124. Ms. Young essentially sought  
 3 information to evaluate a system from the very investigators whose work are being  
 4 evaluated. Although the investigator's perspective may be a relevant piece of  
 5 information, Ms. Young never sought to supplement that information by interviewing any  
 6 complainant who initiated an ERIT investigation or any of the declarants in the present  
 7 case.<sup>16</sup> (*See Young Rep.* ¶ 4.) The court therefore finds that Ms. Young's other data are  
 8 likewise unrepresentative and thus insufficient.

9 If only some of Ms. Young's underlying data was suspect, the court may well find  
 10 that the problem did not undermine the study's overall reliability. However, here, the  
 11 confluence of factors discussed above compels the court to conclude that Ms. Young's  
 12 opinion is not based on sufficient facts or data, as is required under Rule 702. *See Fed. R.*  
 13 *Evid.* 702. Accordingly, the court grants Plaintiffs' motion to exclude Ms. Young's  
 14 opinion in its entirety.

15 Even if Ms. Young relied on sufficient facts or data, the court is doubtful that she  
 16 adequately specified the method by which she arrived at her conclusions. (*See Young*

---

17 <sup>16</sup> Microsoft suggests that because Dr. Goldberg "rarely" conducts interviews, Ms. Young  
 18 is "engaging in a more thorough investigation that Plaintiffs' expert would have undertaken."  
 19 (*Young Resp.* at 9.) This argument misses the mark. Dr. Goldberg's comment regarding  
 20 interviews was made in the context of explaining how she does not rely on interviews because  
 21 for her, the case files serve as the primary source of data. (*See Goldberg Rep.* ¶ 11.)  
 22 Additionally, Dr. Goldberg did not take issue with the fact that Ms. Young conducted interviews;  
 rather, she objected to how Ms. Young's interviews were conducted. Specifically, Dr. Goldberg  
 criticized Ms. Young for the lack of representativeness in her interviewees and the interviewee's  
 inability to "shed light on issues that are not otherwise illuminated. (*Id.* ("[I]t is unlikely that  
 limiting [Ms. Young's] scope to two investigators provided a balanced understanding of the  
 fairness and adequacy of the [ERIT] process.")).

1 Mot. at 9-11.) Experts that rely primarily on experience must explain “how that  
2 experience leads to the conclusion reached, why that experience is a sufficient basis for  
3 the opinion, and how that experience is reliably applied to the facts.” Fed. R. Civ. P. 702,  
4 Advisory Committee Notes, 2000 Amendments. As applicable here, an expert cannot  
5 “rel[y] on the mere fact of his experience with respect to human resources matters to  
6 support [his] conclusion.” *Parton v. United Parcel Serv.*, No. 1:02-cv-2008-WSD, 2005  
7 WL 5974445, at \*5 (N.D. Ga. Aug. 2, 2005).

8 That seems to be exactly what Ms. Young does here. For example, Ms. Young  
9 comments that, based upon her experience, the number of complaints at Microsoft is not  
10 unusual for a company of Microsoft’s size. (Young Rep. ¶ 56.) But she proffers nothing  
11 more. She does not explain how her experience leads her to that conclusion or how her  
12 experience is applied specifically to the size of Microsoft or the number of complaints  
13 here. (*See id.*) Nor does she provide any additional detail, such as the size of other  
14 comparable companies or the volume of complaints at those companies. (*See id.*) In  
15 similar circumstances, courts have excluded such expert opinions. *See Easton v.*  
16 *Asplundh Tree Experts, Co.*, No. C16-1694RSM, 2017 WL 4005833, at \*4-5 (W.D.  
17 Wash. Sept. 12, 2017) (excluding HR expert’s opinion when he “never explains how his  
18 experience led him to” his conclusions).

19 In sum, the court grants Plaintiffs’ motion to exclude Ms. Young’s opinions for  
20 failing to meet the standard as set out in Rule 702 and *Daubert*.

21 //

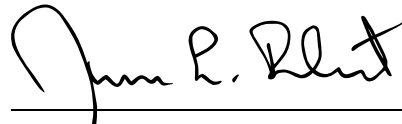
22 //

#### IV. CONCLUSION

Based on the foregoing analysis, the court DENIES Microsoft's motion to exclude Dr. Farber's expert opinions (Dkt. #362), GRANTS in part and DENIES in part Plaintiffs' motion to exclude Dr. Saad's expert opinions (Dkt. # 364), and GRANTS Plaintiffs' motion to exclude Ms. Young's expert opinions (Dkt. ## 367 (sealed), 368 (redacted)).

Additionally, the court DIRECTS the clerk to provisionally file this order under seal. The court ORDERS counsel to meet and confer regarding the need for redaction and to jointly file a statement on the docket within ten (10) days of the date of this order to indicate any such need.

Dated this 25th day of April, 2018.



JAMES L. ROBART  
United States District Judge